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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,511	01/15/2004	Hans W. Bruesselbach	B-4759NP 621649-7	7055
36716 7590 11/27/2007 LADAS & PARRY 5670 WILSHIRE BOULEVARD, SUITE 2100 LOS ANGELES, CA 90036-5679			EXAMINER PEACE, RHONDA S	
			ART UNIT 2874	PAPER NUMBER
			MAIL DATE 11/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

21

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/759,511

Applicant(s)

BRUESSELBACH ET AL.

Examiner

Rhonda S. Peace

Art Unit

2874

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 November 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-5, 7-14, 16, 17, 19-28, 30 and 31.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 8/20/2007
13. ☐ Other: _____.

MR. Connelly-Cushwa
MICHELLE CONNELLY-CUSHWA
PRIMARY EXAMINER

11/26/07

Rhonda S. Peace
Rhonda S. Peace 11/15/07.
Examiner
Art Unit 2874

Applicant argues, with respect to claim 1, the combination of Li and Wong fails to disclose aspects of claim 1, specifically a plurality of optical fibers fused together and tapered along said fused section, and a facet formed by cutting and polishing, or by cleaving, said tapered region.

Specifically, Applicant asserts Li discloses an optical coupling with a first coupler having a single fiber light guiding transmitting section 24 and second coupler having two or more individual single fiber light guides 32. Applicant asserts said first coupler does not teach or disclose "a plurality of optical fibers," and instead discloses a single fiber. Applicant also asserts the said second coupler does not disclose "a plurality of optical fibers fused together to form a tapered region, and therefore, Li also does not disclose a "facet formed in a tapered region of a plurality of optical fibers." Further, as Li does not disclose said facet, Li therefore also does not disclose said facet having "a cross section other than approximately equal to the cross section of an individual single-mode fiber."

Li discloses a coupler wherein a plurality of single mode optical fibers 32 which are joined together via a unitary tapered portion 28, wherein said unitary tapered portion 28 transitions to a single optical fiber 32. This resulting form of Li takes on the same form resulting from a plurality of fibers fused and tapered together, as fusing a plurality of fibers causes the silica in said fibers to melt together and form a unitary structure, wherein said unitary structure is then tapered. However, as stated in the previous Action, Li does not disclose obtaining this resulting form by fusing the plurality of fibers along a section to thereby form a fused and tapered section. Wong discloses obtaining the resulting form via a fusing and tapering process, and one of ordinary skill in the art would have been motivated to use such a technique (fusing and tapering) to form the coupler as described by Li, as Wong discloses fusing is an easy way to form a tapered bundle (Li does disclose a tapered bundle, as seen in Figure 3), and moreover, the fusing method allows for even distribution of optical energy among all fibers within the bundle (see Wong, col. 2 lines 45-49 and col. 5 lines 3-23). Li discloses the structure, and Wong discloses a method of forming the structure of Li. Further, Li discloses a facet 24 formed at the end of said the single fiber, and this facet corresponds to the facet as required by claim 1, for the reasons cited in the Final Rejection mailed 8/6/2007. Moreover, as the combination of Li and Wong discloses the limitations described above, said combination also discloses said facet and said prescribed diameter of said facet. Therefore, the limitations of claim 1 mentioned above are addressed by the combination of Li and Wong.

Applicant further argues, with respect to claim 1, Li is not in the same field of invention as the present invention or to Wong, as Li is drawn to joining one single light guide to multiple single fiber light guides for illumination purposes, while Wong is directed to couplers for optical fibers used in communication cables, and the present invention is drawn to coupling laser light in fibers.

While Wong, the present invention, and Li are drawn to different applications of optical fibers, they are nonetheless considered in the same field of invention, as all are directed to the use of optical fibers within optical applications and are designed to guide light such that a single input is divided into a plurality of outputs or visa versa.

Regarding claim 9, Applicant asserts the rejection is improper, as Li does not disclose a fused fiber bundle as required by claim 1, and therefore cannot show the recited uniform stretching required in claim 9.

For the reasons cited above, the combination of Li and Wong disclose a fused and tapered fiber bundle as called for in claim 1. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's arguments with respect to claims 20-27 and 31 are unpersuasive for the reasons cited above with respect to claim 1. Pertaining to claims 5 and 14, Applicant argues the combination of Wong and Russell fail to disclose "Emitting the optical inputs as a single combined optical output at the facet into free space." To the Examiner's previous remarks on this issue, Applicant responds by asserting Figure 9 of Wong shows but an intermediate step in the construction of Wong's splitter, and Wong does not disclose the contents of Figure 9 useable in any way or for any purpose. Therefore, Applicant asserts the Examiner is using hindsight reasoning in making the rejection.

While Figure 9 is but an intermediate step in the process of making the splitter of Wong, one of ordinary skill in the art would recognize that the device of Figure 9 is usable within other optical systems, and will have uses beyond the disclosure of Wong. One of ordinary skill in the art would have viewed the disclosure of Wong as a whole and would have found it obvious to modify the device of Figure 9 for another purpose, such as for use with a free space-propagating signal. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Similarly with claim 11; Applicant argues Wong fails to disclose "illuminating the facet with a single optical input traveling in free space." Applicant supports this assertion by stating Wong requires a focusing element to be attached to the facet in each of the independent claims, and therefore the focusing lens is an essential feature. Therefore, any suggestion to remove this focusing element (such as in the event Wong was to illuminate said facet with a single optical input from free space) is improper. Applicant's arguments on this matter are found unpersuasive for the reasons cited above with respect to claims 5 and 14.

Pertaining to claim 28, Applicant argues Wong fails to disclose the facet receiving a single optical input from free space, for the reasons cited above with respect to claims 5 and 14, and additionally does not disclose this feature as the focusing element of Wong is considered an essential feature of Wong, due to its presence in all of the independent claims of Wong. The Examiner disagrees for the reasons cited above, and additionally for the reasons cited in the Final Rejection mailed 8/6/2007.

Further pertaining to claim 28, Applicant asserts the Examiner has ignored various aspects of the claim, such as, "the sum of the mode shapes of the fibers being calculated and the core/cladding size ration and stretch being selected, to maximize coupling of the free space beam into the core ensemble." Applicant asserts this language clearly and specifically defines structure of the claimed fiber apparatus, and therefore must be given weight. Further the Applicant adds, "Apparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Examiner maintains that the above-recited portion of claim 28 only requires the device to be formed such that the coupling of the free space beam is maximized. "The sum of the mode shapes of the fibers being calculated and the core/cladding size ration and stretch being selected," refers to the method in which the structural limitations are achieved. A device claim, as the Applicant has stated, covers what the device is, and does not require how the device is formed. Therefore, the Examiner maintains her previous position, and has given patentable weight to all limitations within claim 28 which describe structural limitations.

Applicant's arguments pertaining to claims 2-4, 7, 8, 10, 12, 13, 16, 17, 19, and 30 are found unpersuasive for the reasons cited above.

Rhonda J. Leau 11/15/07.

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11/26/07